

fig. 1A

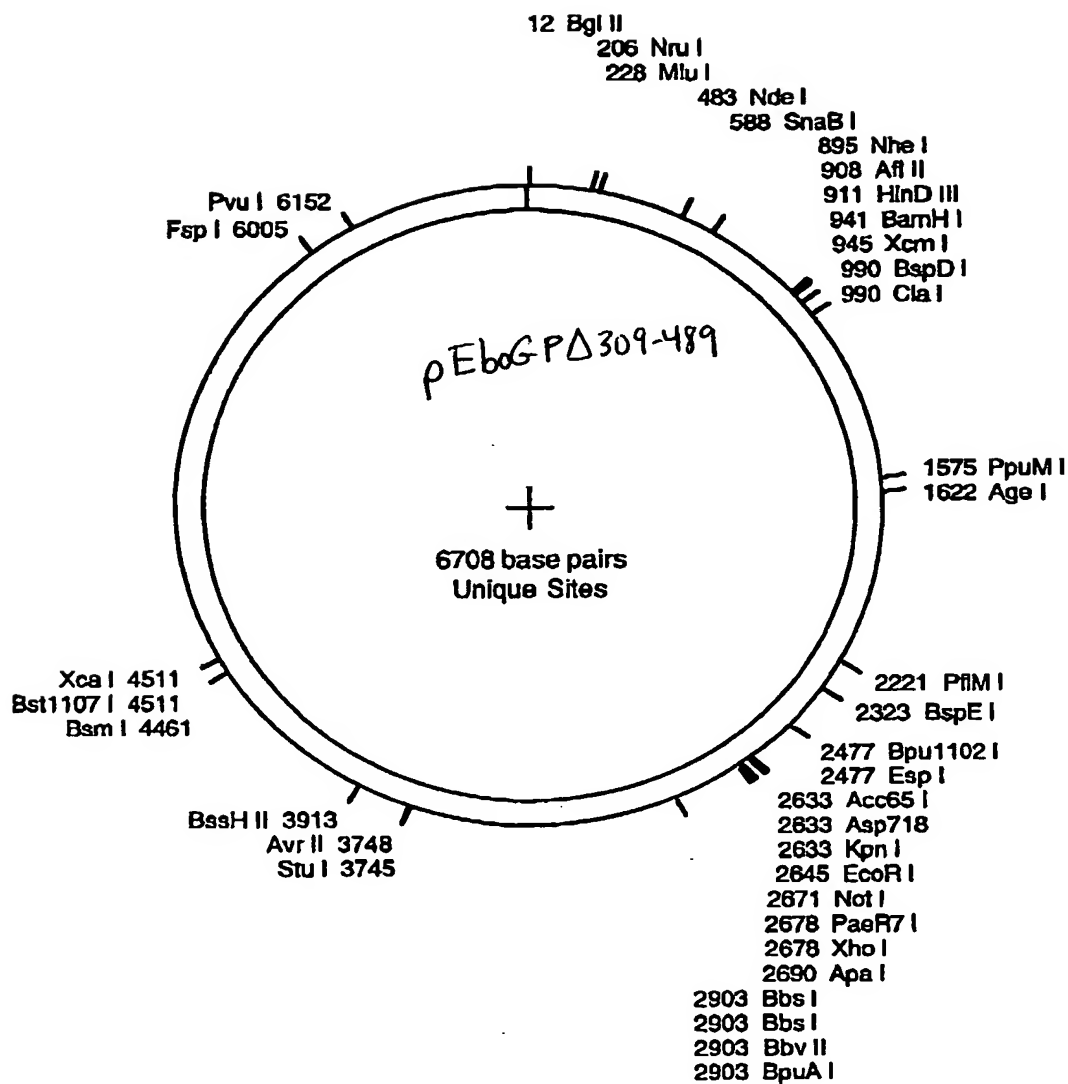
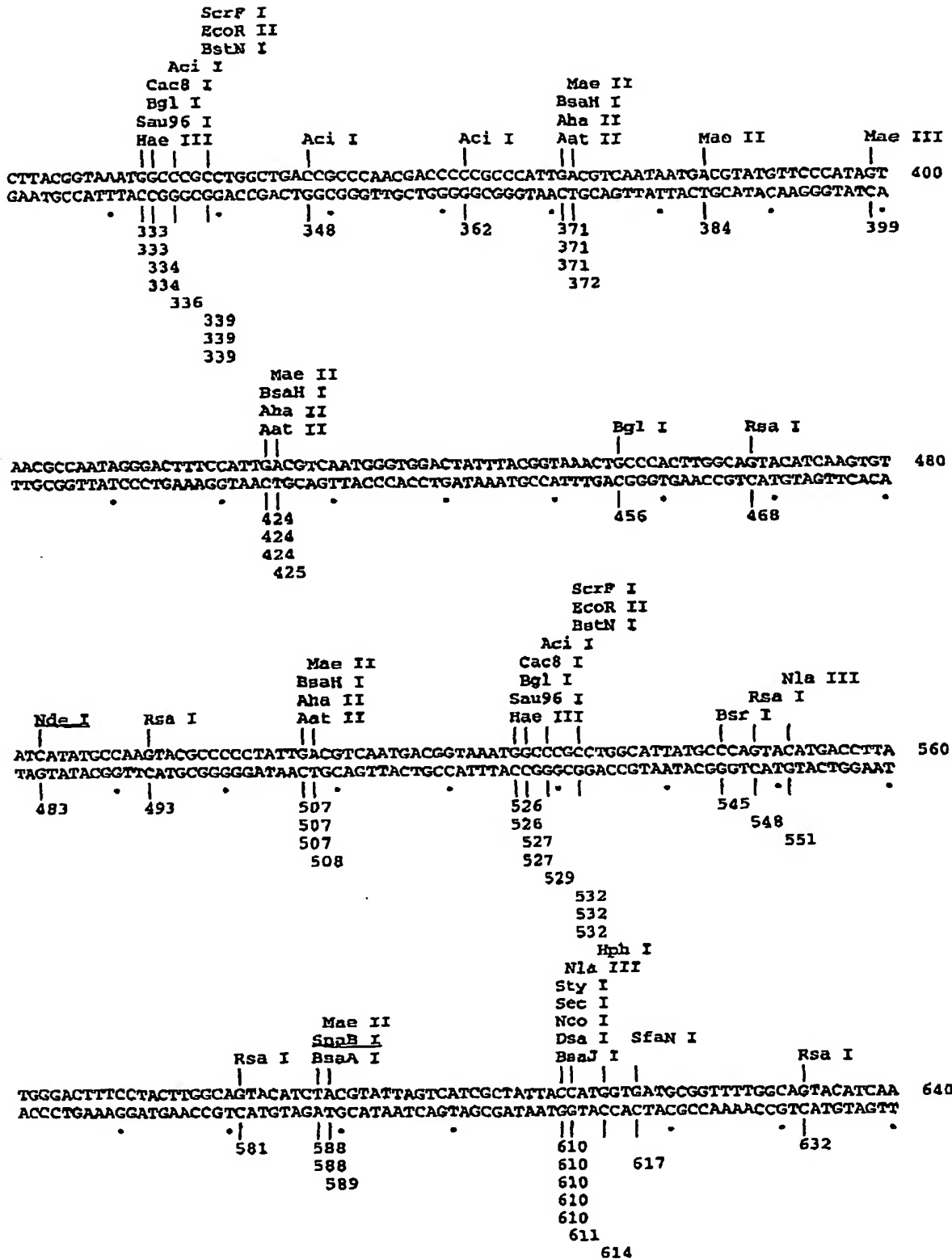
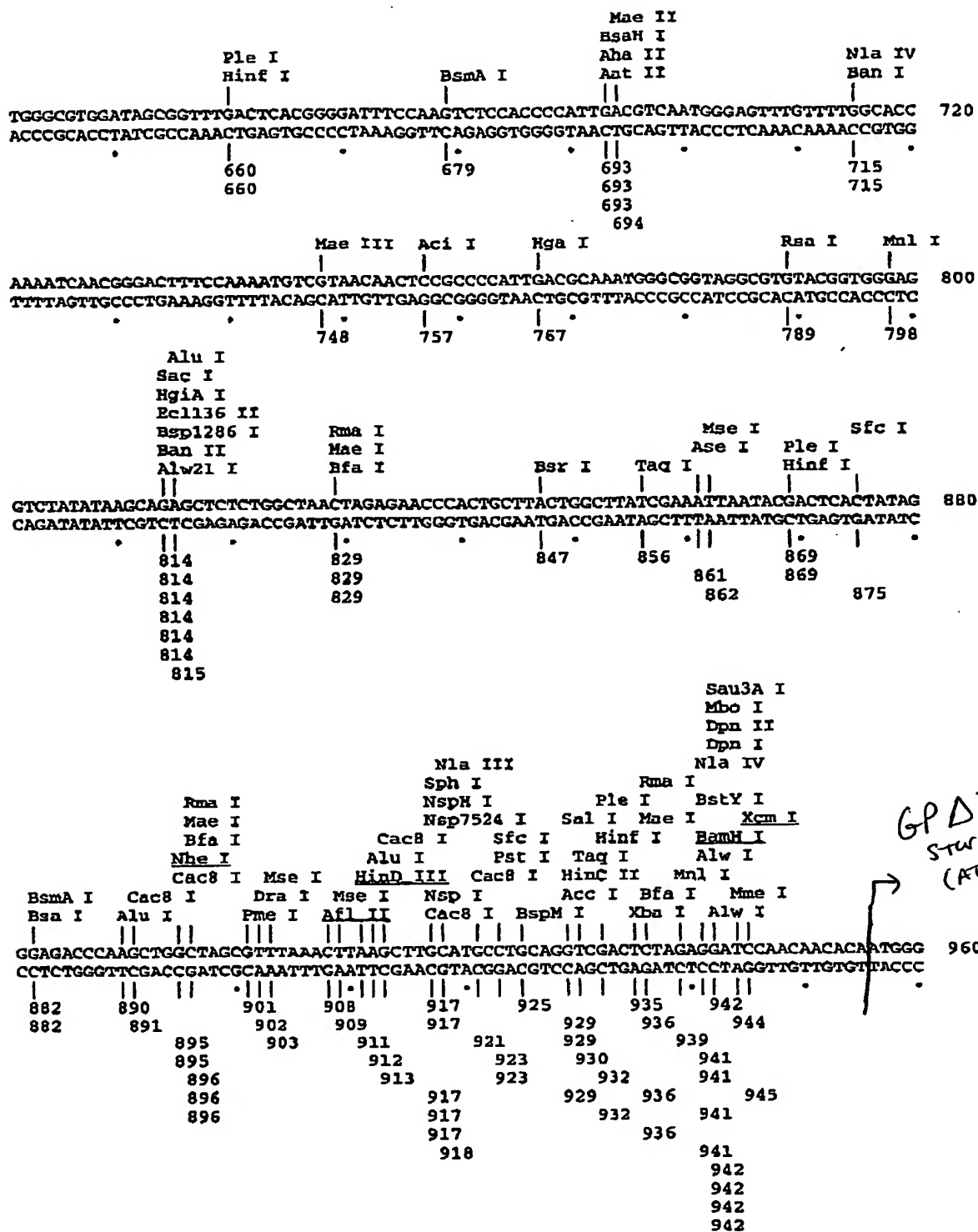


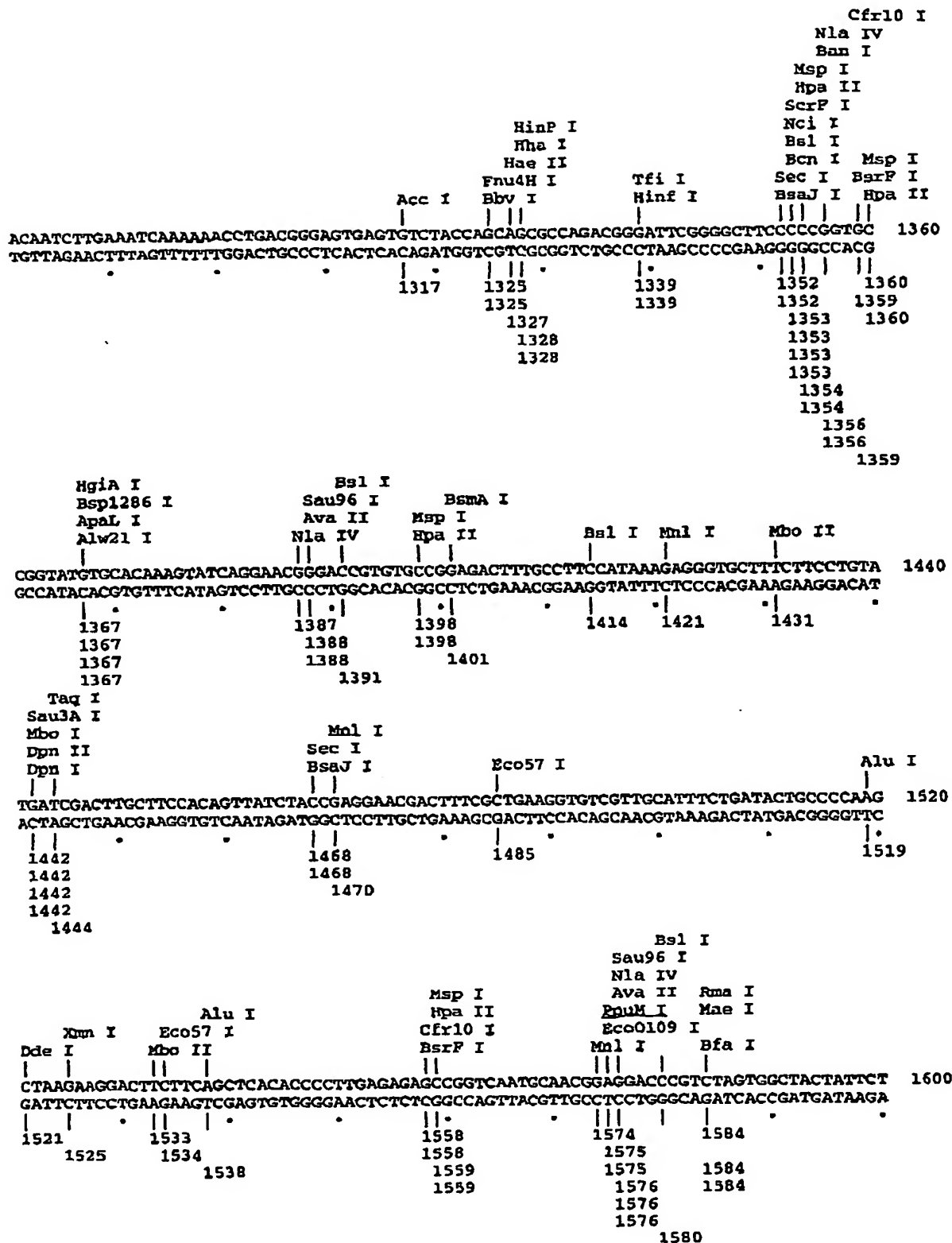
fig. 1B

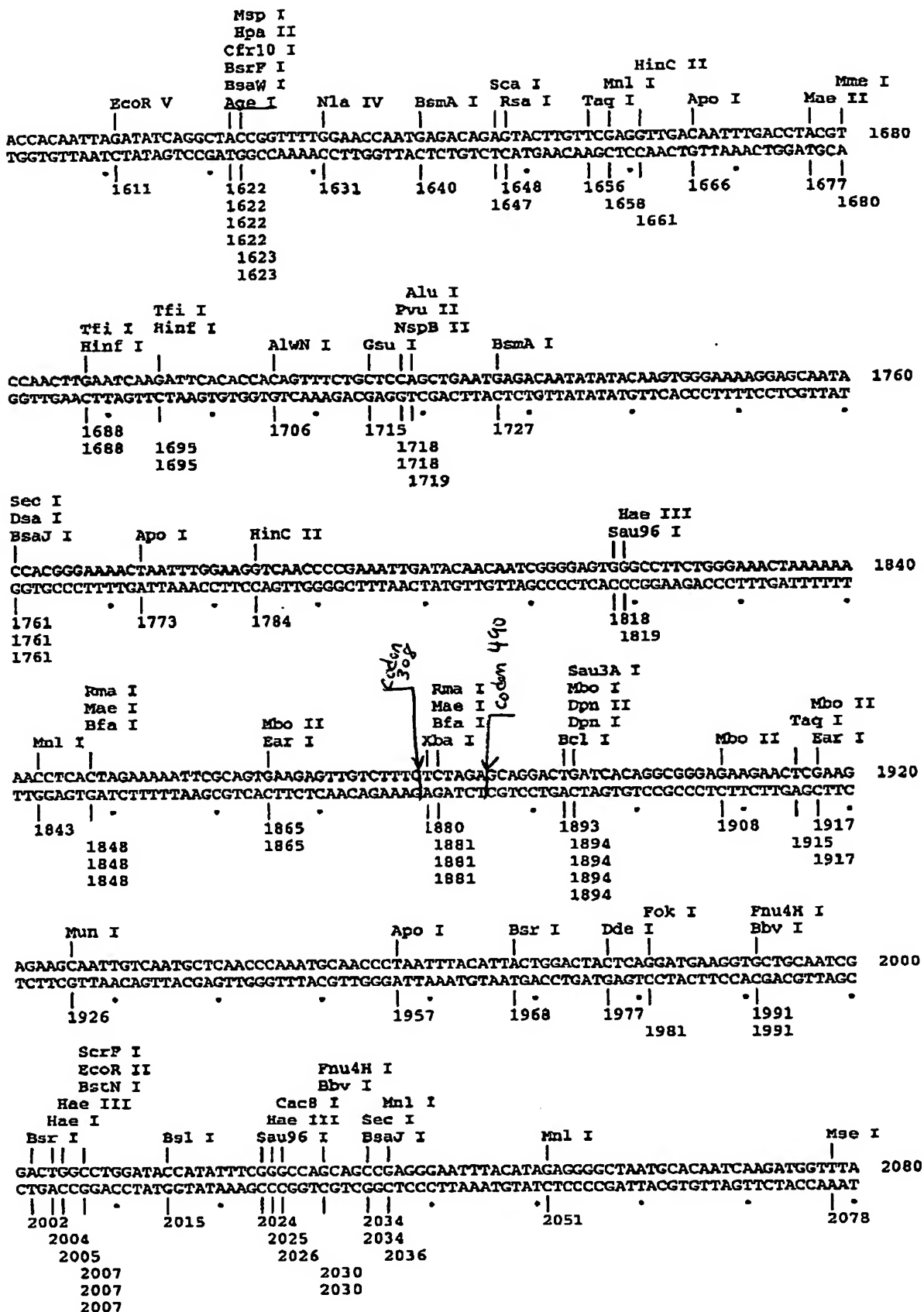
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 Sau3A I  
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 Dpn II Dpn I Dpn II  
 Dpn I BstY I Dpn I  
 Alw I Bgl II Alw I  
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 CTGCC TAGCCCTCTAGAGGGCTAGGGGATACCCAGCTGAGAGTCATGTTAGACGAGACTACGGCGTATCAATTCGGTCATA  
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 4 12 21 32 39 57 69  
 5 12 21 32 43 60 74  
 5 13 21 32 61 75  
 5 13 21 33  
 5 13 21 35  
 13 35  
 13  
 Cac8 I  
 BstU I  
 Tth111 II Mme I Mml I Dde I Hha I Alu I  
 || || || || || ||  
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 GACGAGGGACGAACACACAACCTCCAGCGACTCATCAGCGCTCGTTTTAAATTCGATGTTGTTCCGTTCCGAACCTGGCT  
 || || || || || ||  
 89 98 102 109 118 131  
 118 134  
 119  
 120  
 Pnu4H I  
 Bbv I  
 Tfi I  
 Hinf I  
 Nla III  
 Mun I Mbo II Dde I  
 || || || || || ||  
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 GTTAACGTACTTCTTAGACGAATCCCAATCCGCCAAAACGCGACGAAGCGGTACATGCCCGGTCTATATGCGCAACTGTAA  
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 167 173 173 198 200 207 217 228  
 173 200 218 229 232  
 Rma I  
 Mae I  
 Bfa I Mse I  
 Spe I Ase I  
 || || || || || ||  
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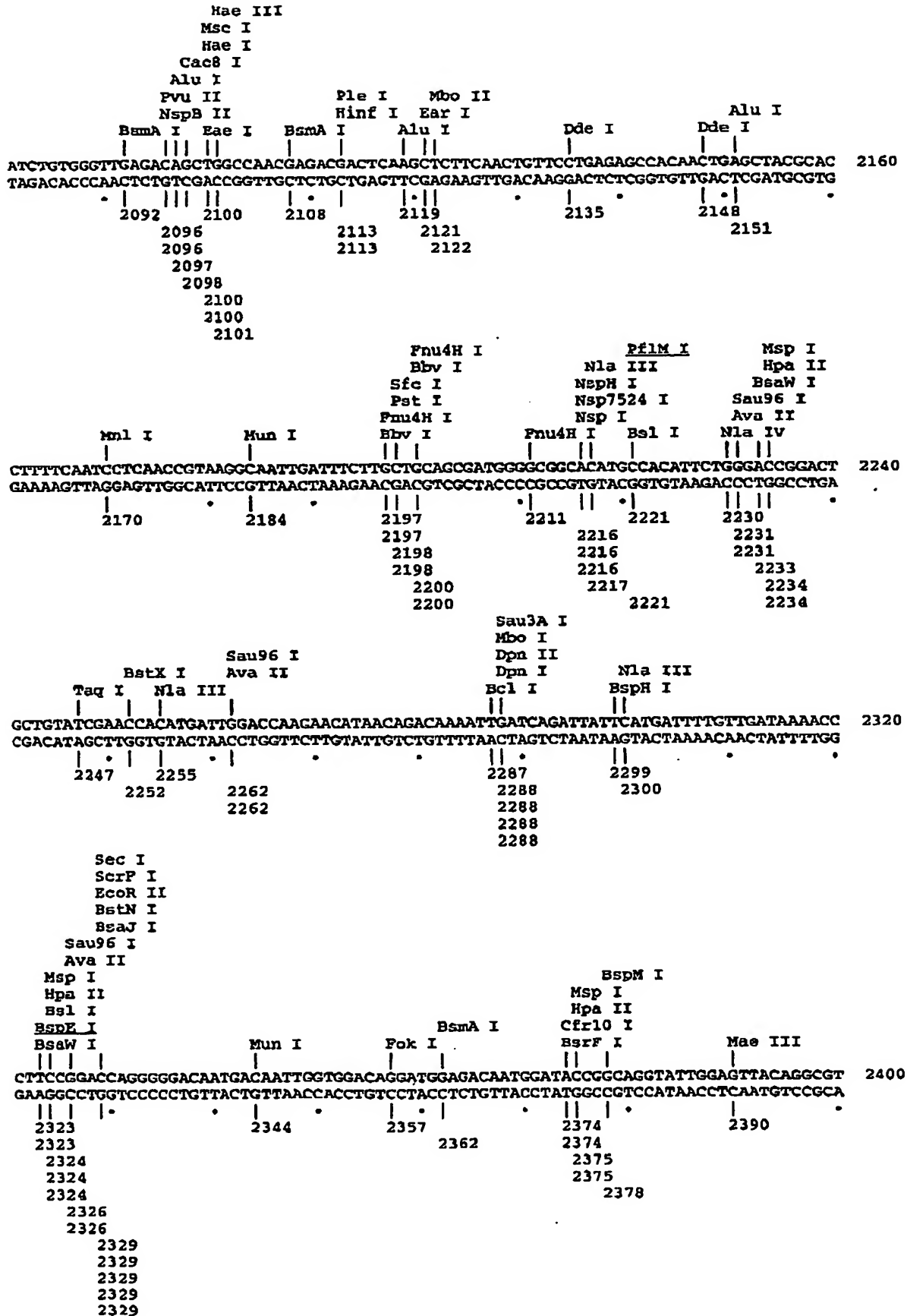


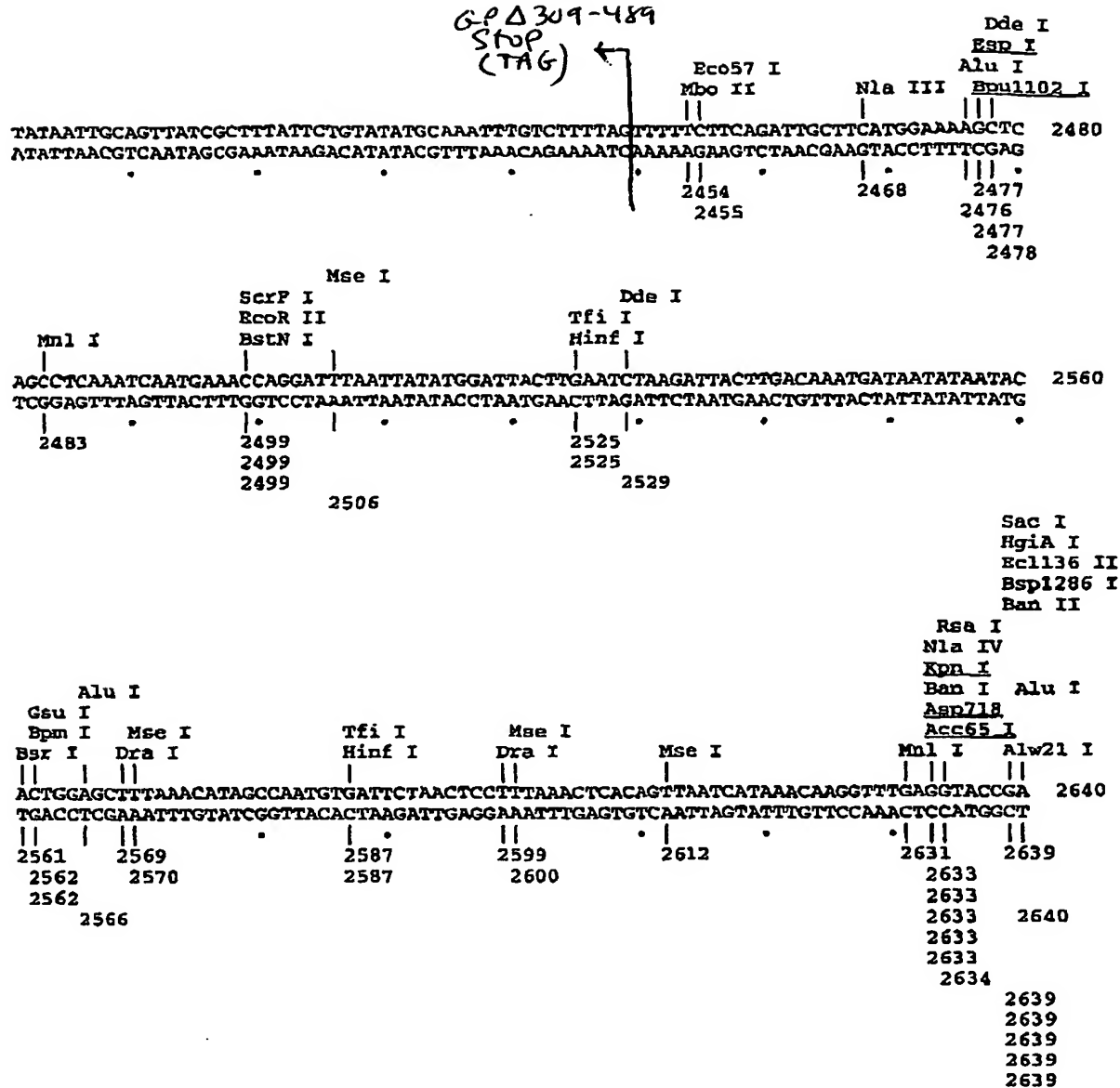
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Cla I  
Sau3A I  
Mbo I  
Dpn II  
BssS I Hinf I  
Mae III Ssp I Mnl I BspD I  
Mae III Dpn I Mnl I  
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984 989 989 989 990 991 993  
Fok I  
Ple I  
Hinf I  
Xmn I Fok I  
GAACATTTTCCATCCCACTTGGAGTTCATCCACAATAGCACATTACAGGTTAGTGTGTCGACAACTAGTTTGTCTGTGAC 1120  
CTTGATAAAGGTAGGGTGAACCTCAGTAGTGTATCGTGTAAATGTCCAATCACTACAGCTGTTTGATCAAACAGCACTG  
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1097 1106 1097 1106 1098 1106  
Mne I  
Sau3A I  
Mbo I  
Dpn II  
Dpn I  
Fok I Mun I Dpn I Tfi I Hinf I Taq I  
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1146 1146 1146 1151  
Msp I  
Hpa II  
BsaW I  
Sau96 I  
Ava II HgiE II  
Eco57 I Bsl I Alu I Nph I  
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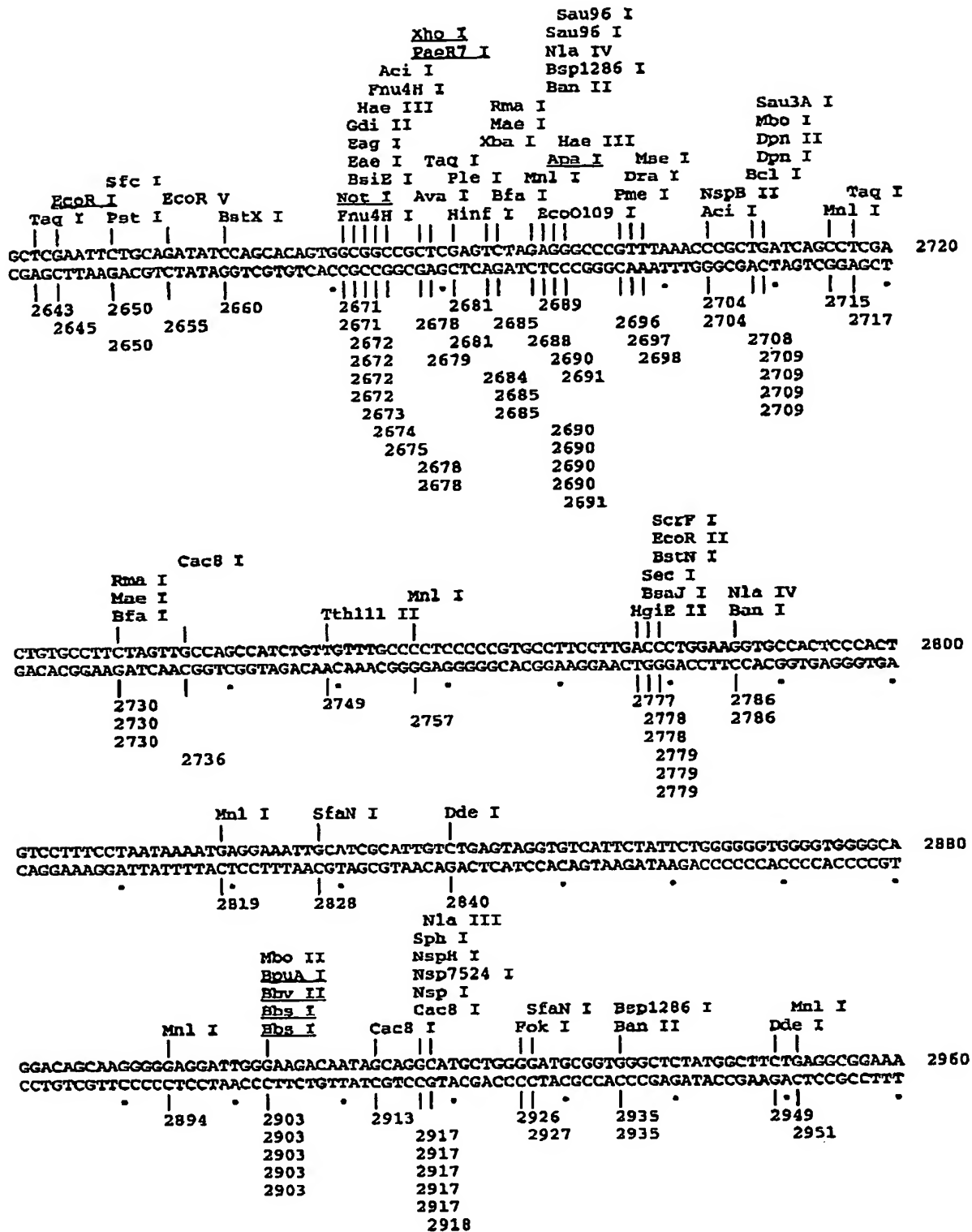




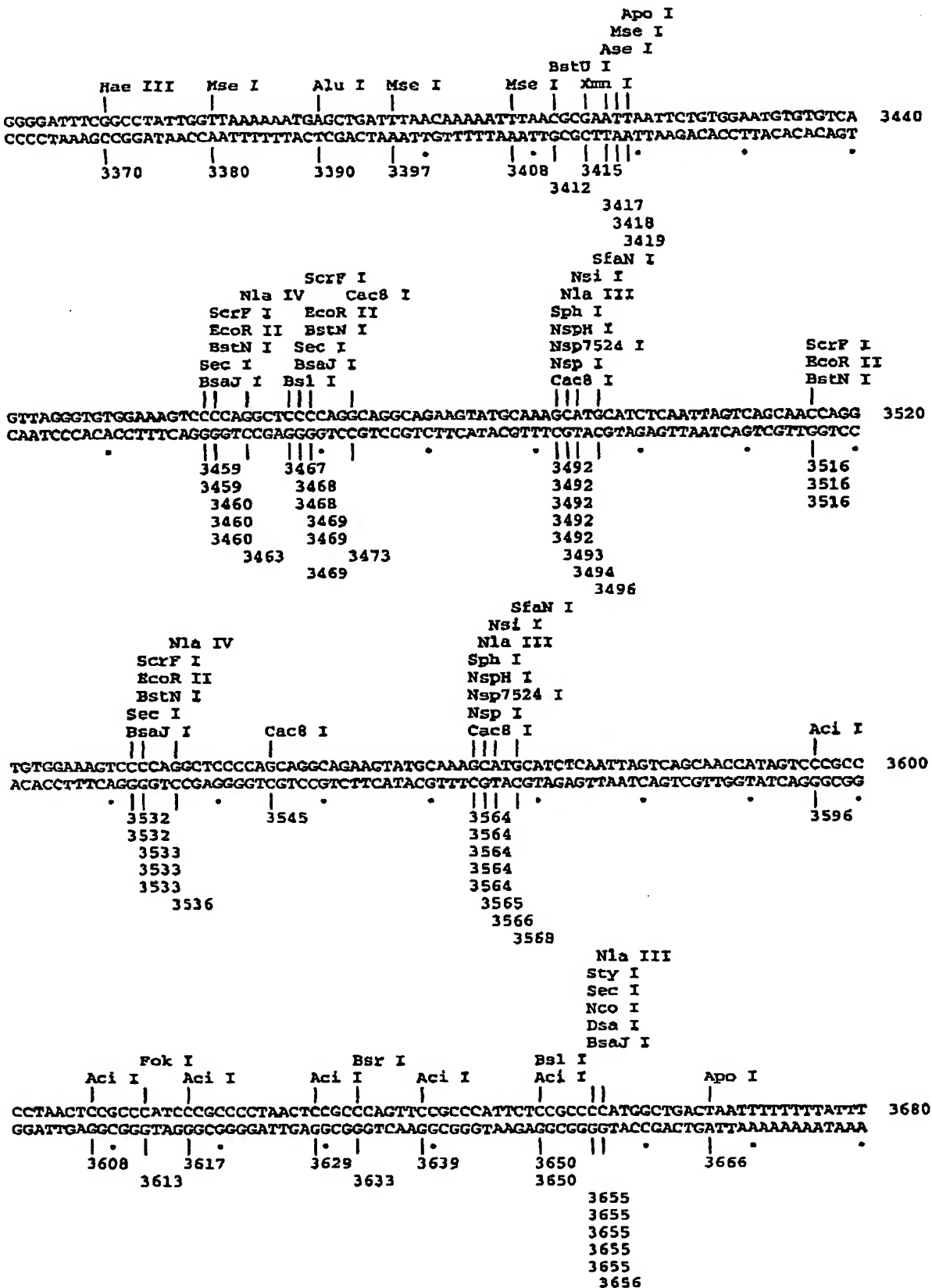








[illegible]



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3749

Scrf I  
Nci I  
Msp I  
Hpa II  
Bcn I  
Xma I  
Sma I  
Sec I  
Scrf I  
Nci I  
BsaJ I  
Bcn I  
Ava I

Alu I Alu I

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3770  
3770

Rma I  
Mae I  
Bfa I  
Sty I  
Sec I  
BsaJ I  
AVX II  
Hae III  
Stu I  
Hae I  
Mnl I  
BseR I  
Mnl I  
Mnl I  
Dde I  
Alu I  
Mnl I  
BsaJ I  
Sec I  
Mnl I  
Aci I  
Pnu4H I

Sau3A I  
Mbo I  
Dpn II  
Dpn I  
Bcl I  
Sau3A I  
Mbo I  
Dpn II  
Dpn I  
BstY I  
Alw I  
Hinc II  
Mae II  
Afl III  
Pml I  
Eco72 I  
BsaA I  
Mse I  
Ase I







Msp I  
 Hpa II  
 NgoM I  
 Nae I  
 Cfr10 I  
 Cac8 I  
 BsrF I  
 Gdi II  
 Eag I  
 Eae I  
 Msp I  
 ScrF I  
 Nci I  
 Bcn I  
 BstU I Hae III  
 Hinf I BsiE I  
 Hha I Hpa II  
 Dra III  
 HgiA I  
 Bsp1286 I  
 ApaL I  
 Alw21 I  
 Cac8 I  
 Mnl I  
 BseR I  
 Sec I  
 BsaJ I  
 Hae III  
 Gdi II  
 Eae I  
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 Pml I  
 Eco72 I  
 BsaA I  
 Afl III  
 Tfi I  
 Hinf I  
 Taq I  
 Aci I  
 Pnu4H I  
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 Tfi I  
 Hinf I  
 ScrF I  
 Nci I  
 Msp I  
 Hpa II  
 Bcn I  
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 4253 4317  
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 Hpa II  
 NgoM I  
 Nae I  
 Cfr10 I  
 Cac8 I  
 BsrP I  
 Bsl I  
 Sau3A I  
 Mbo I  
 Dpn II  
 BstY I  
 Alw I  
 Hga I  
 BsaH I  
 Aha II  
 Fok I  
 Mnl I  
 BstU I  
 Nla III  
 Mbo II  
 Alu I  
 Pnu4H I  
 Bbv I  
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 4321 4335 4344 4351 4360 4393  
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 4324 4335 4350  
 4324 4335 4351  
 4324 4335 4351  
 4324 4339 4351  
 4324 4341 4351  
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 4325

Rma I  
Mae I  
Bfa I

Mae III                  SfaN I                  Bsm I

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ATTACCAATGTTTATTTCGTTATCGTAGTGTAAAAGTGTATTTCGTAAAAAAGTGACGTAAGATCAACACCAAACA

4406                  4424                  4461                  4466  
4466  
4466

Rma I  
Mae I

Taq I Rma I  
Xca I Sal I Mae I  
BstII07 I Mnl I Bfa I  
Acc I Hinc II Alu I

Nla III                  Acc I                  Bfa I                  Alu I                  Nla III                  Alu I

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4504                  4518                  4526                  4534                  4547                  4556

4511                  4518                  4528  
4511                  4523                  4530  
4511                  4518                  4526  
4519                  4526

4530  
4530

Nla IV  
Ban I

Sec I  
ScrF I  
EcoR II  
BstNI  
BsaJ I

Aci I                  Apo I                  Msp I  
Hpa II

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4582                  4589                  4610                  4631  
4610                  4631  
4631  
4631  
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4636  
4636  
Pvu4H I  
Sbv I  
Alu I  
Pvu II  
NspB II

Cac8 I

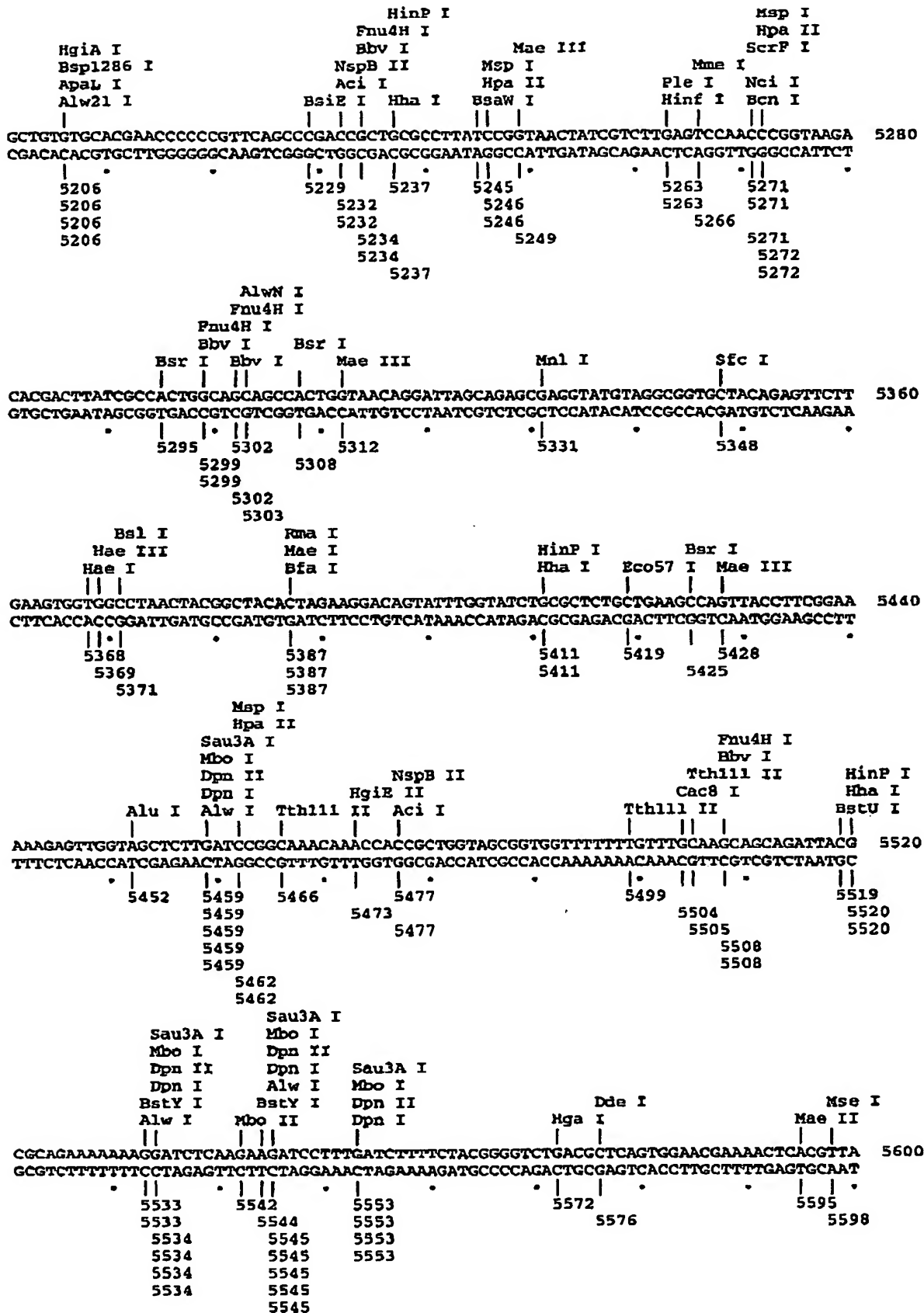
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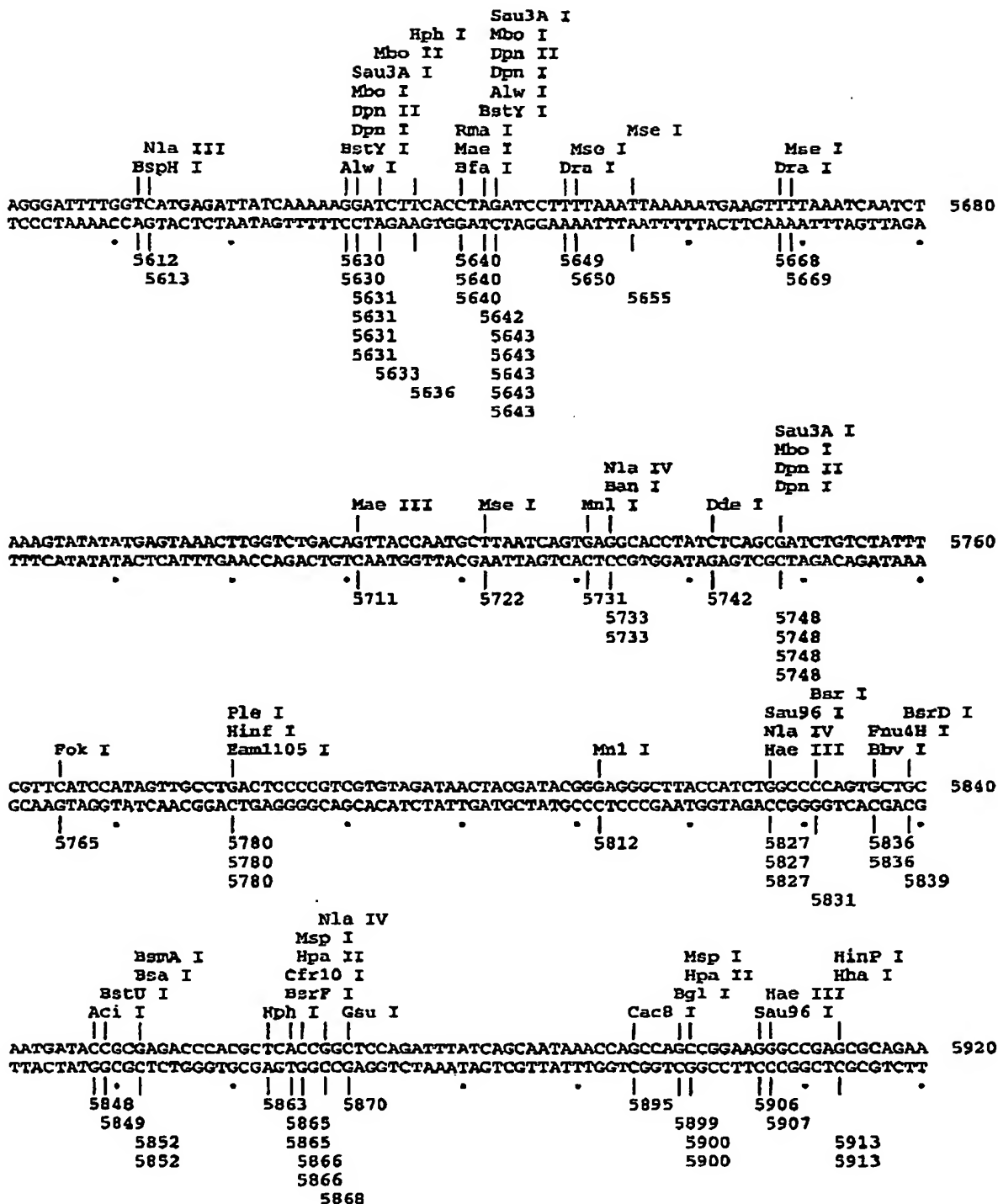
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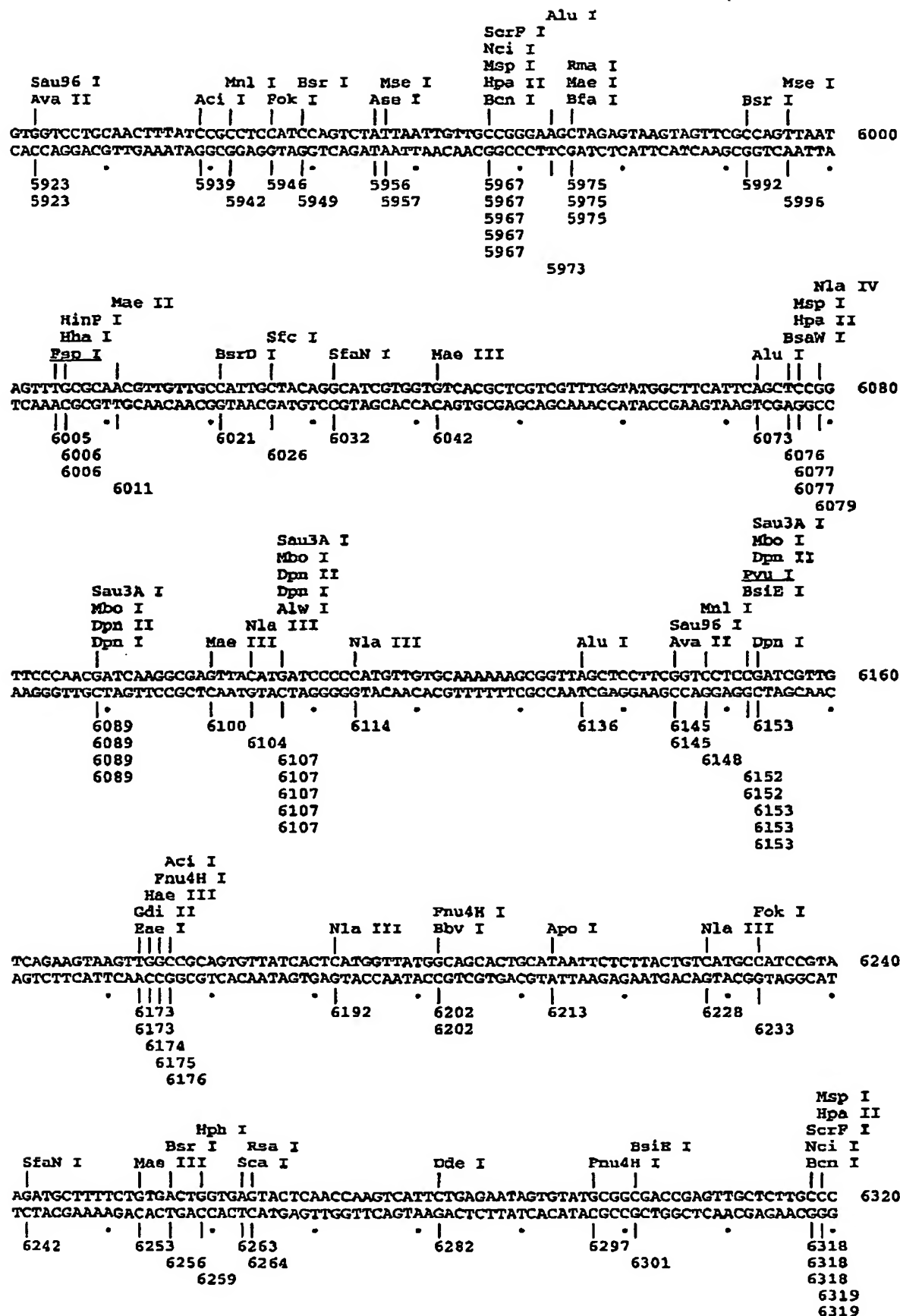
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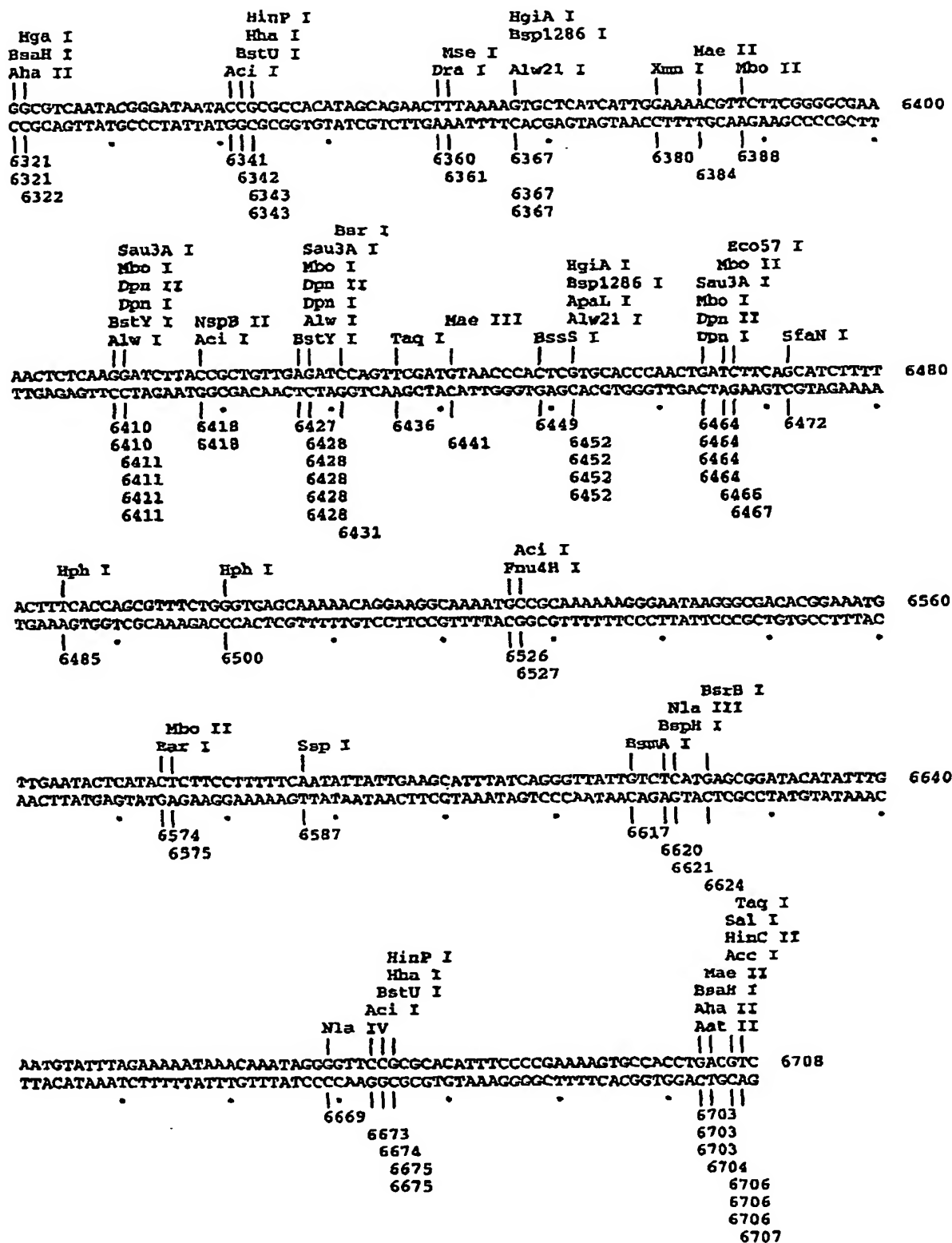
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4715  
4716  
4716

520









## Restriction Endonucleases site usage

Aat II	6	Bsm I	1	Fnu4H I	33	Nsp7524 I	6
Acc I	7	BsmA I	10	Fok I	12	NspB II	8
Acc65 I	1	Bsp1286 I	11	Fsp I	1	NspH I	6

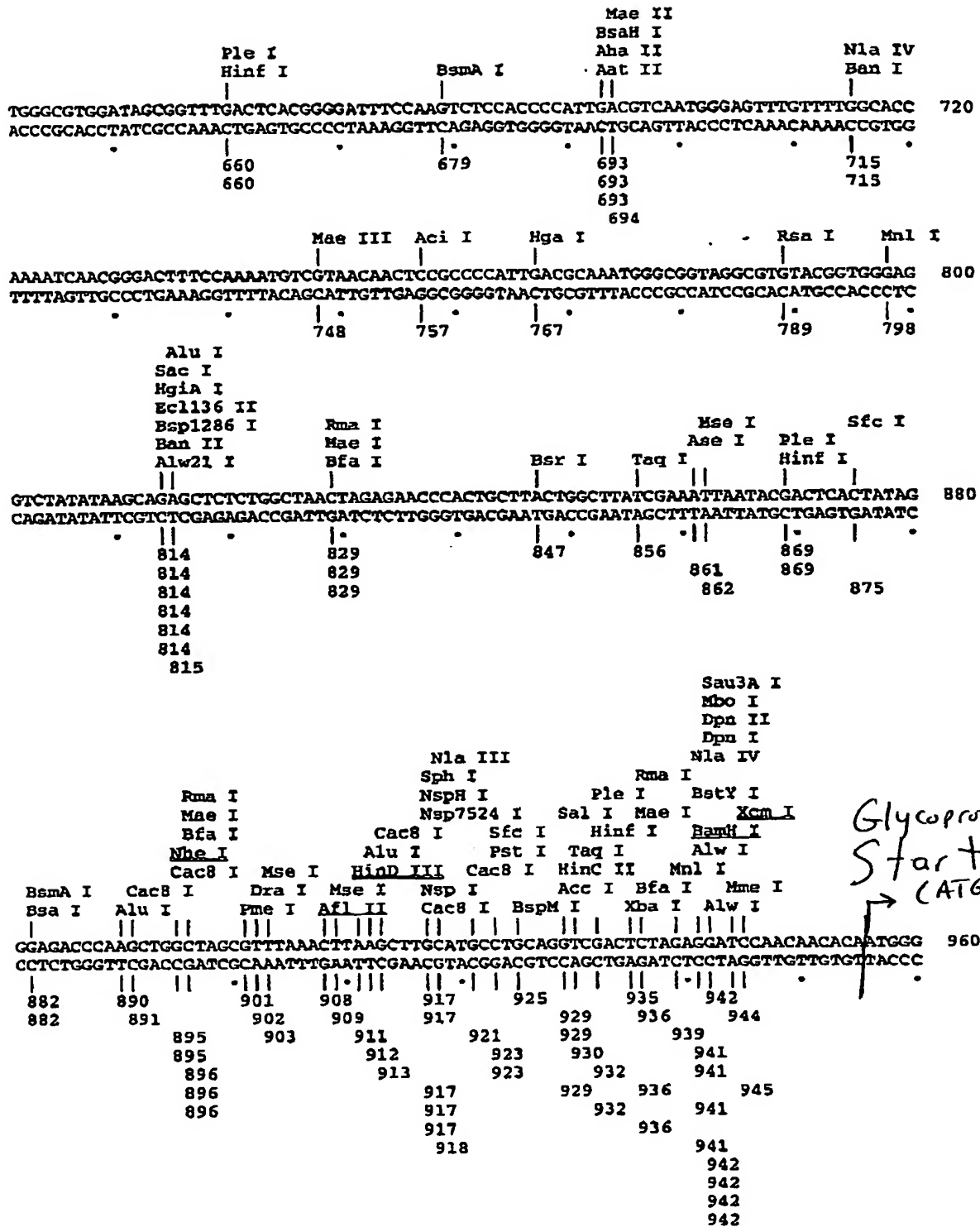


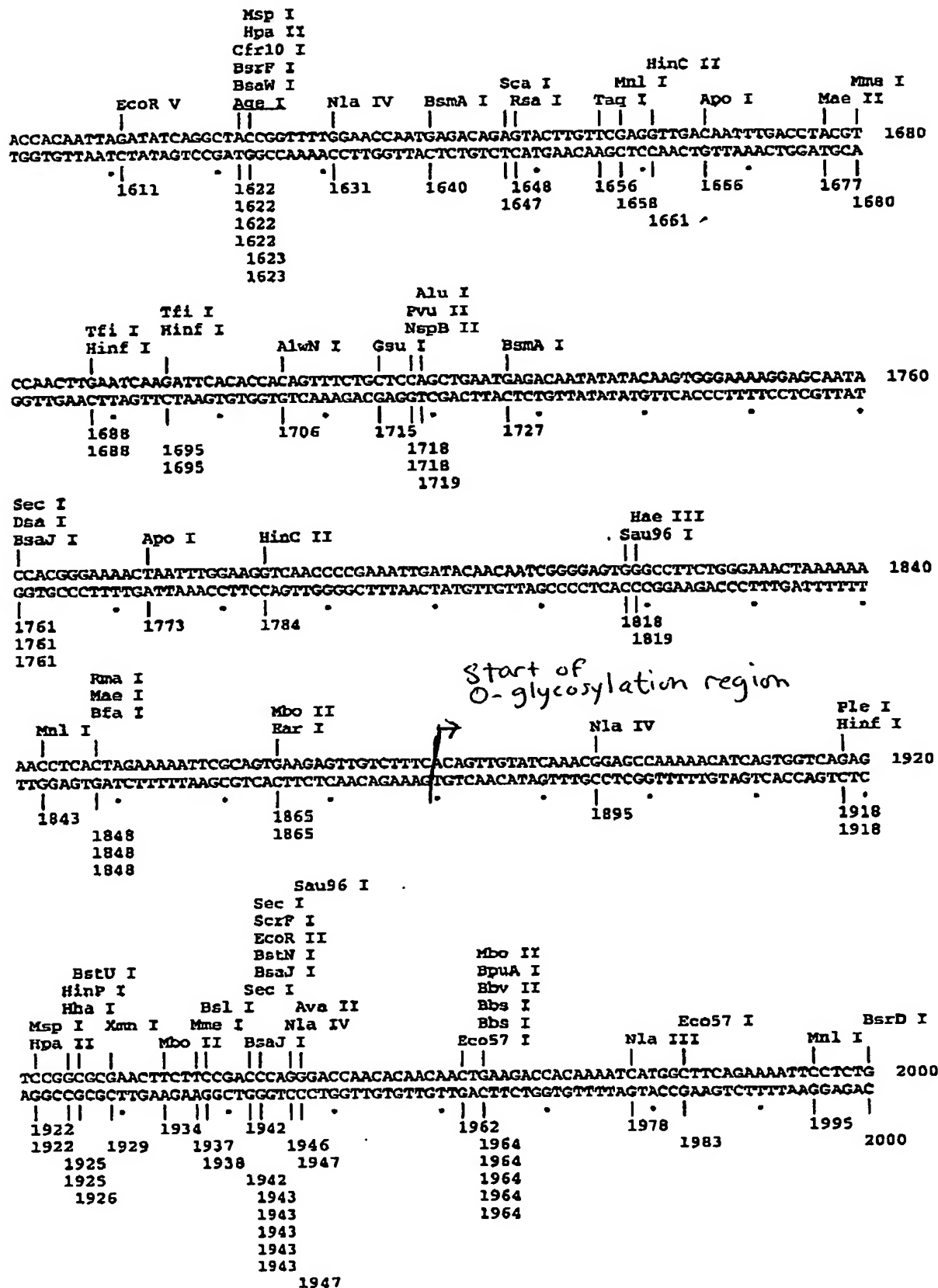
fig. 1C



Tfi I  
Taq I  
Cla I  
Sau3A I  
Mbo I  
Dpn II  
BssS I Hinf I  
Mnl I BspD I  
Mae III Ssp I Mae III Dpn I Mnl I  
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962 970 979 983 989 1000  
984 993  
989  
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991  
993  
Taq I Rna I  
Sal I Mae I  
Hinc II Bfa I Eam1105 I  
Acc I Spe I Mae III  
Xmn I Pok I Ple I Hinf I  
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1098 1106  
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Sau3A I  
Mbo I Taq I  
Dpn II Tfi I  
Hinf I  
Mae II  
Fok I Mun I Dpn I  
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1146 1164  
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BsaW I  
Sau96 I  
Ava II HgiE II  
Eco57 I Bsl I Hph I  
Alu I  
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 Msp I  
 Hpa II  
 ScrF I  
 Nci I  
 Bsl I  
 Bcn I Msp I  
 Sec I BsrF I  
 BsaJ I Hpa II  
 Acc I  
 Bbv I  
 Tfi I  
 Minf I  
 Bsu4H I  
 Hha I  
 Hae II  
 HinP I  
 Hpa I  
 HgiA I  
 Bsp1286 I  
 ApaL I  
 Alw21 I  
 Bsl I  
 Sau96 I  
 Ava II  
 Nla IV  
 Msp I  
 Hpa II  
 BsmA I  
 Bsl I  
 Mnl I  
 Mbo II  
 Mnl I  
 Sec I  
 BsaJ I  
 Eco57 I  
 Alu I  
 Xmn I  
 Eco57 I  
 Mbo II  
 Dde I  
 Mnl I  
 Hpa II  
 Cfr10 I  
 BsrF I  
 Mnl I  
 Bfa I  
 Bsl I  
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 PvuM I  
 Mae I  
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 Mnl I  
 Bfa I

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 1367 1388 1401  
 1367 1391  
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 Sau3A I  
 Mbo I  
 Dpn II  
 Dpn I  
 Mnl I  
 Sec I  
 BsaJ I  
 Eco57 I  
 Alu I  
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 GATTCTTCTTGAAGAAGTCGAGTGTGGGGAACCTCTCTCGGCCAGTTACGTTGCTTGGGCGAGATCACCGATGATAAGA  
 1521 1533 1558 1574 1584  
 1525 1534 1558 1575 1584  
 1538 1559 1575 1584  
 1559 1576 1584  
 1576 1576  
 1580



CAATGGTTCAAGTGCACAGTCAAGGAAGGGAAGCTGCAGTGTCTGCATCTAACAACCCCTTGCCACAATCTCCACGAGTCCC 2080  
GTTACCAAGTTTACAGTGTCTCAGTTCCTTCCCTTCGACGTCACAGCGTAGATTGTTGGGAACGGTGTAGAGGTGCTCAGGG

HgiA I Sfc I  
Bsp1286 I Pst I  
ApaI I Fnu4H I  
Alw21 I Bbv I  
Alu I SfaN I Ple I  
Hinf I

2012 2032 2044 2074  
2012 2033 2074  
2012 2033  
2012 2034  
2034

Msp I  
Hpa II  
BspE I  
BsaW I  
Sau96 I  
ScrF I  
EcoR II  
BstN I

Mnl I HgiE II Ava II  
Dde I

2086 2093 2102 2151 2153  
2099  
2099  
2099  
2102  
2104  
2104  
2105  
2105

Sau96 I  
Nla IV  
Msp I  
Fnu4H I  
Bbv I  
Aci I Ava II  
Hpa II

Aci I  
Hph I Mne I Mnl I BsiE I Hpa II

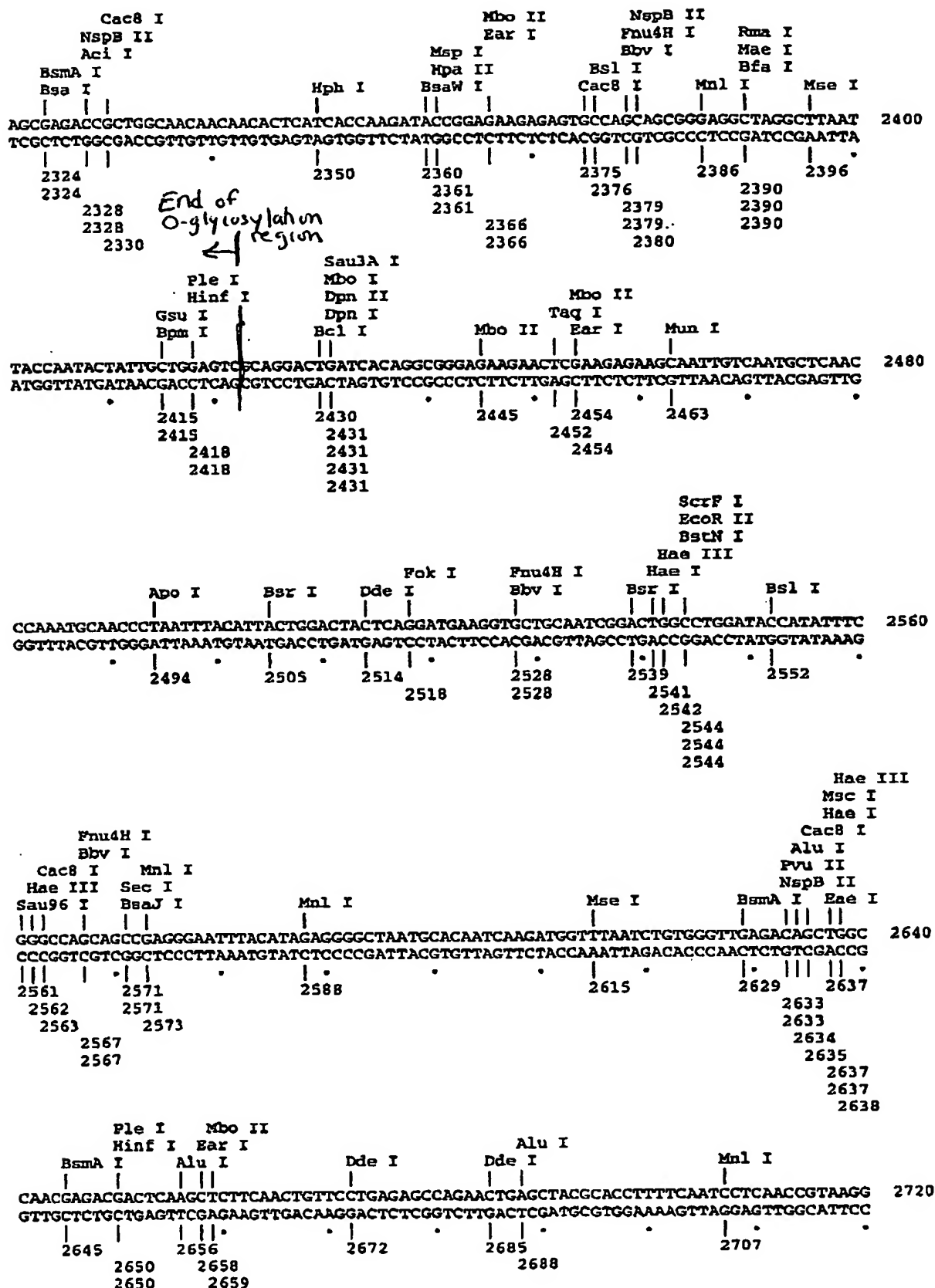
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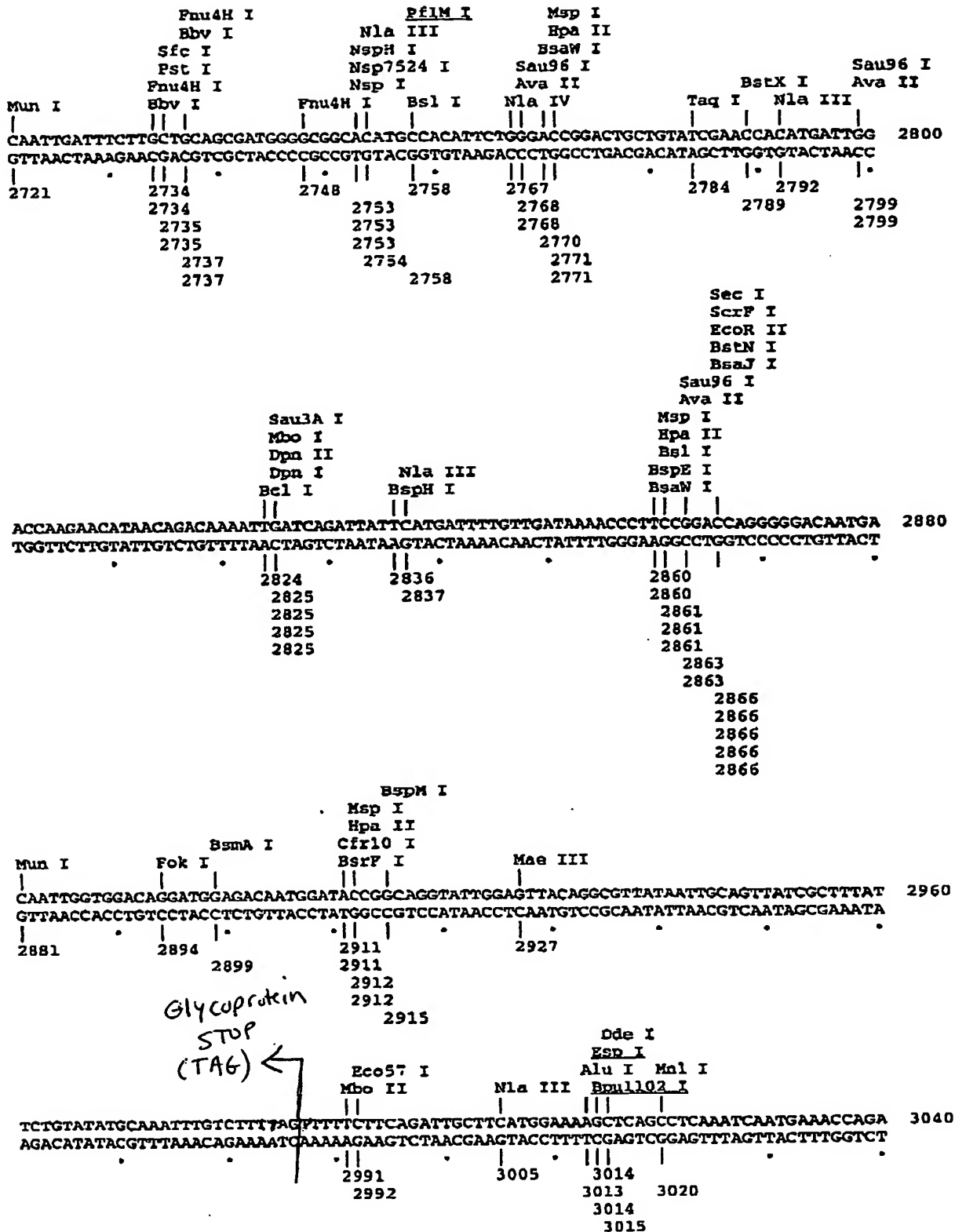
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Sau96 I  
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Ava II  
HgiA I ScrF I  
Bsp1286 I EcoR II  
Alw21 I BstN I Aci I

CCCCAAAAGCAGAGAACACCAACAGCAGCAAGAGCACTGACTTCCTGGACCCCGCCACCACAAAGTCCCCAAAACCAC 2320  
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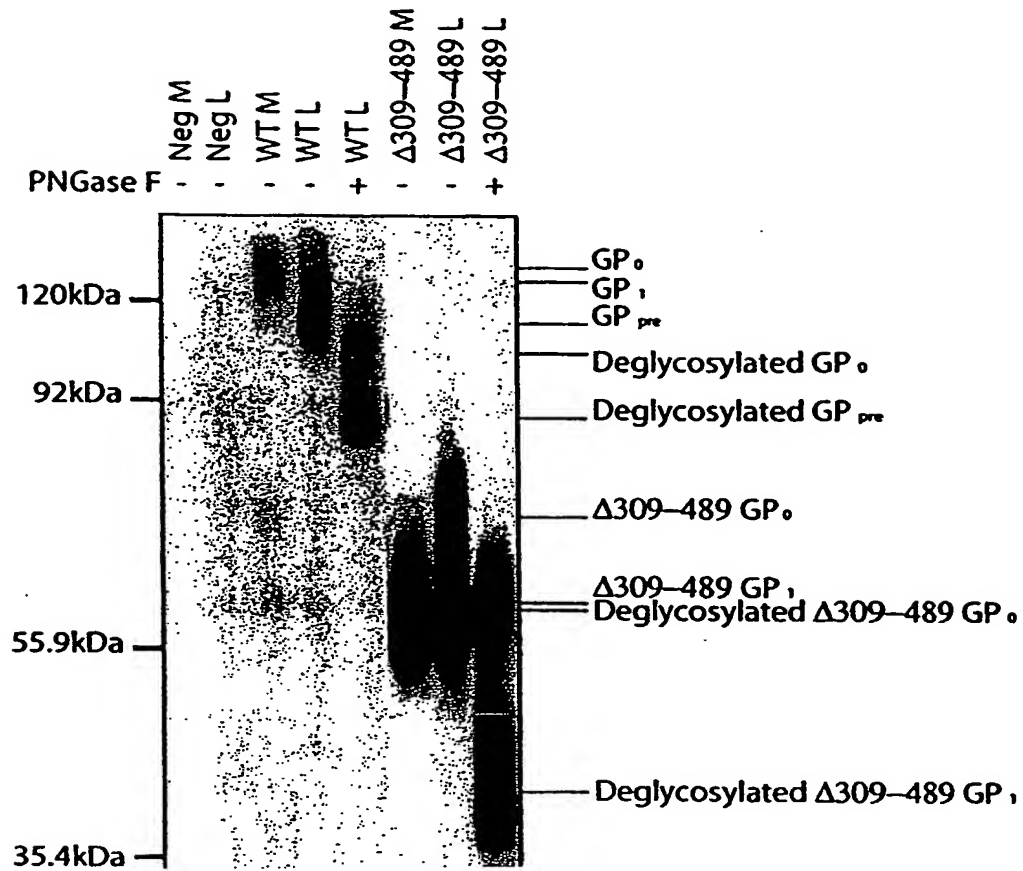


fig. 2

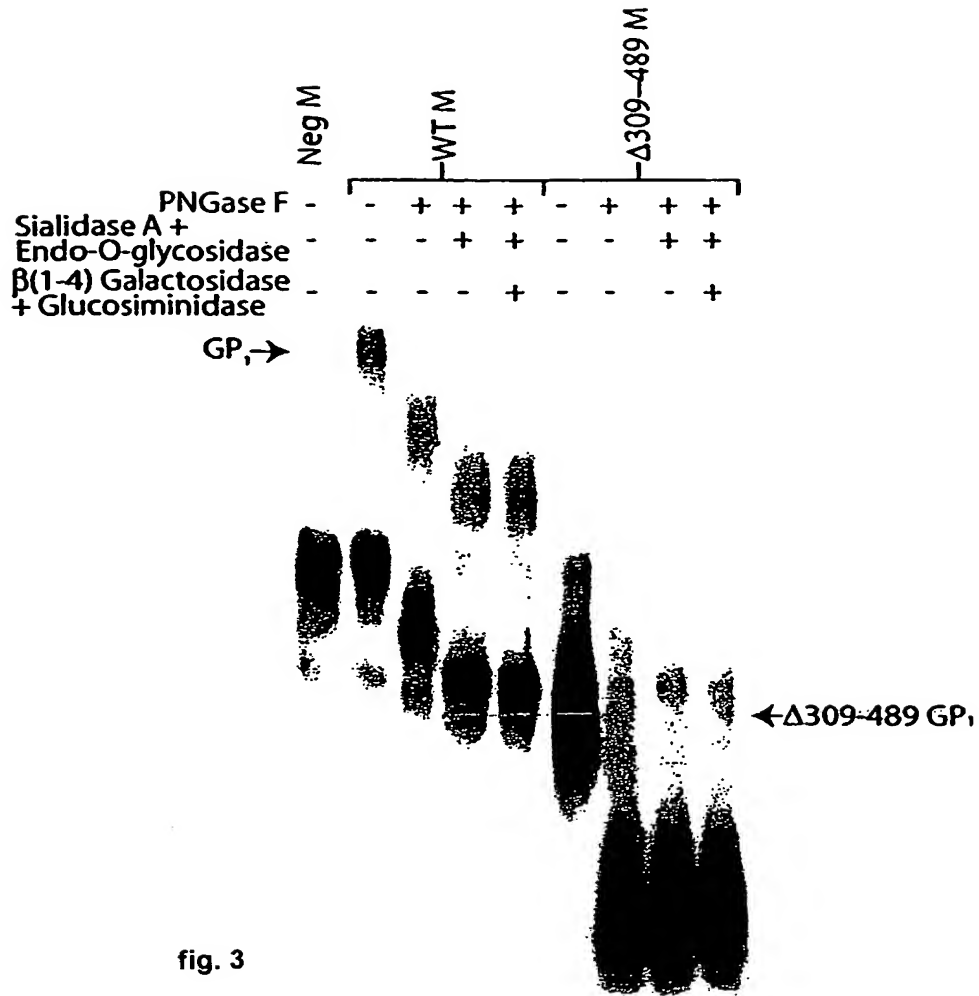


fig. 3



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